

CHAPTER 5: CONSTRUCTION REQUIREMENTS

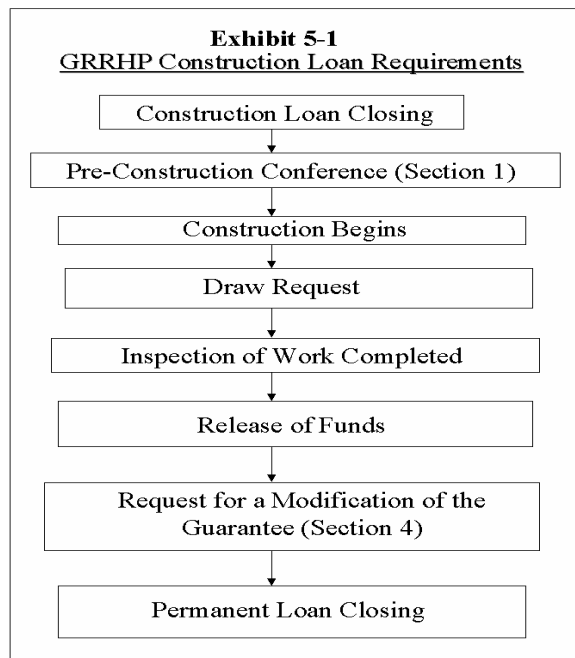
5.1 INTRODUCTION

A primary goal of the GRRHP is to encourage the construction of affordable yet safe and sanitary housing units in rural areas. To achieve this goal, the Agency will review the quality of construction of any housing developed under the program. However, the Agency will be more involved when it is guaranteeing construction advances. This chapter will detail the basic construction requirements that must be met whenever the Agency will be providing assistance through loan guarantees, as well as the additional requirements that apply when the Agency guarantees construction advances.

Key Topics in this Chapter

- Pre-Construction Conference
- Construction Requirements
- Guarantees of Construction Advances
- Application Processing for Construction Advance Guarantees

The construction loan processing steps are detailed in Exhibit 5-1.



SECTION 1: PRE-CONSTRUCTION CONFERENCE

5.2 CONFERENCE REQUIREMENTS

After a contract is awarded and all documents are completed and signed, and prior to any actual construction work, a pre-construction conference must be held between the borrower, contractor, architect, and lender representatives, including the lender's fee inspector. The Agency must be notified of the conference and Agency representatives may attend. The conference is held to reach mutual understandings on all terms and conditions of the contract documents. The adequacy of the plans and specifications, as well as the cost estimates, must be reviewed.

The Agency's environmental review must be examined and any required mitigation measures discussed at this time. The construction schedule must be reviewed to ensure that the work can be completed in a timely manner. If any changes in the plans and specifications are proposed, they must be approved as described in Paragraph 5.18. The Agency has developed a suggested format to record the minutes of the pre-construction conference (*Form RD 1924-16, Record of Pre-Construction Conference*) which is available upon request.

SECTION 2: BASIC CONSTRUCTION REQUIREMENTS

5.3 OVERVIEW

For both permanent loans and combination construction and permanent loans, the lender must ensure that the construction meets all local codes and that the product will comply with the Agency environmental guidelines. The construction when there is no guarantee requested for the construction loan must meet the state standards and will be discussed in full detail with Agency prior to the issuance of the guarantee. The State Director has some latitude on the requirements for construction that the Agency has because the risk to the Agency is minimal when the Agency is not guaranteeing the construction. The Agency may waive the requirements for architectural services if it feels that the builder and the lender can ensure that the construction can be completed in an acceptable manner. When the project is built the Agency should be able to access the quality and suitability for the Guaranteed Rural Rental Housing Program.

The lender must ensure that all of the construction requirements described in this section will be met when the Agency is providing a guarantee on construction-permanent loans.

5.4 CONSTRUCTION CONTRACTOR EXPERIENCE AND CAPACITY

The lender must ensure that the contractor has demonstrated overall financial stability and is experienced in building multiple-family housing of a size, design, scope and complexity that is similar to the proposed project.

5.5 DEBARMENT AND SUSPENSION

The lender must ensure that the general contractor, and all subcontractors and suppliers, sign certification statements indicating that they are not currently debarred or suspended from participating in Federally funded programs. The certification statement is included on *Form AD-1048, Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion - Lower Tier Covered Transactions*, which is available from the Agency. The signed form must be submitted with each proposal to the borrower, including the proposal from the general contractor and each subcontractor. Failure to provide the signed certificate is sufficient grounds to reject the company's bid or proposal. Information on debarred or suspended contractors is available on the Internet at <http://www.arnet.gov/epls/>.

Construction Requirements

The construction requirements cover the following topics:

- Contractor experience and capacity;
- Debarment and suspension;
- Architectural Services;
- Plans, specifications and cost estimates;
- Environmental requirements;
- Construction;
- Inspections; and
- Warranty

The Agency will verify that the general contractor does not appear on the debarment/suspension list. *Form AD-1048* must be reviewed by the lender as part of the application for loan guarantee (see Chapter 4, Section 3).

5.6 ARCHITECTURAL SERVICES

The services of a professional architect or engineer must be obtained to perform architectural services related to the construction of the project. This person or organization must be duly licensed and qualified in accordance with State law.

Architectural services include:

- Schematic designs and preliminary cost estimates;
- Preparation of bid documents;
- Design development exhibits;

- Working drawings and specifications for the construction of the entire project in accordance with applicable regulations and codes, and review of the final construction budget;
- Assistance in the selection of the contractor and the preparation of the construction contract;
- Attendance at pre-construction conference to discuss work and schedules;
- Administration of the construction contract including periodic inspections of all phases of construction;
- Review/approval of pay requests;
- Preparation of change orders/directives;
- Preparation of “punchlist” items needing completion and documentation for, and participation in, the final inspection;
- Advice and consultation regarding the warranty items; and
- Development of final “as built” drawings.

5.7 PLANS, SPECIFICATIONS AND COST ESTIMATES

The borrower must use the services of a professional architect or engineer duly licensed and qualified in accordance with State law to provide architectural services, including the development of plans, specifications and cost estimates. The lender must provide a copy of preliminary plans, specifications, and cost estimates as part of the application package for Agency review.

Plans, specifications, and estimates must fully describe all of the work to be completed, including all landscaping, construction, repairs, and site development work. The plans must be clear and accurate, with adequate dimensions and sufficient scale for estimating purposes. Technical data, tests, or engineering evaluations needed to support the design of the development must be included.

The level of housing amenities provided in the plan must be competitive within that market. For example, washers, dryers, and air conditioning may be necessary for the units to be

competitive within the local market. Amenities must not, however, include such luxury items as swimming pools and health clubs unless specifically approved by the Agency.

The State Architect will review the preliminary documents. This review will take into account the amenities being provided, the quality of materials being used, development costs (including a review of life cycle cost analyses, as discussed in Paragraph 5.9), and other items pertinent to the quality and cost of construction and the operation of the property. The project architect must make appropriate changes to the plans, specifications, and cost estimates to respond to Agency concerns prior to submitting a final set of plans, specifications, and cost estimates to the lender. When these items are submitted to the lender, the project architect must also provide a Plan Certification on *Form RD 1924-25, Plan Certification*, which is available from the Agency.

The lender must provide a copy of the final plans, specifications, and cost estimates, together with the Plan Certification, to the Agency for written concurrence by the State Architect. All of these items will be retained as a part of the Agency file. Construction documents that must be submitted to the Agency are shown in Exhibit 5-2.

Exhibit 5-2		
Construction Documents That Must Be Submitted for Any Loan Guarantee		
Document	When to Submit	Reference
Preliminary plans, specs, and cost estimates	As soon as practicable	Paragraph 5.7
Final plans, specs, and cost estimates, and Plan Certification	Prior to issuance of construction loan guarantee	Paragraph 5.7
Deviations from approved plans and specifications	Final as built plans, after construction complete, prior to final contract of guarantee	Paragraph 5.10
Certification that basic construction requirements have been met	Prior to issuance of construction loan guarantee	Paragraph 5.12

5.8 ENVIRONMENTAL REQUIREMENTS

The Agency is required by law to complete an environmental review under the National Environmental Policy Act (NEPA) prior to issuing a conditional commitment of guarantee to the lender. This environmental review may require redesign or relocation of structures, as well as mitigation measures to be taken during and after construction to protect any important resources which may be affected by the project. The lender must comply with all applicable Federal, State, and local laws regarding environmental protection and pollution abatement, in addition to applicable permitting and zoning ordinances. It is the responsibility of the lender to ensure that the borrower/developer, architect, and contractor are fully aware of and comply with the mitigation measures contained in the Agency's environmental review and all other applicable Federal, State, and local laws and regulations.

5.9 CONSTRUCTION

The contractual arrangements for the construction of a rural rental housing project must be contained in a written contract between the borrower and the construction company (general contractor).

The construction contract form published by the American Institute of Architects (*AIA Document A-101*) is acceptable provided that it is modified to meet the Agency's requirements. Agency requirements for construction contracts are described in RD Instruction 1924-A at § 1924.13(e)(1)(ii), and RD Instruction 1924-A, Guide 1, Attachment 6. Other AIA documents used and supplemented in RD Instruction 1924-A, Guides 1 and 4, are: Instructions to Bidders; Architect's Agreement; and General Conditions to the Construction Contract. The AIA construction contract form is available from the AIA.

Construction of the housing and related facilities must be in conformance with the approved plans and specifications, applicable laws, ordinances, codes and regulations, and good construction practices. To avoid future maintenance problems, quality materials must be used. As a minimum, the materials must be consistent with those described in the Marshall & Swift Company's basic description of "average quality multifamily residences." Life cycle cost analyses must be employed to compare materials and systems and determine which are most economical, considering the sum of all costs: initial, operation, and maintenance. In the case of minor cost items, the Agency may waive the life cycle cost analysis. An example of a life cycle cost analysis is provided in Exhibit 5-3.



5.10 INSPECTIONS

Actual construction work needs to be inspected by or on behalf of the lender to verify that the terms and conditions of the construction contract are met. This includes verifying that work is being performed in accordance with the approved plans and specifications without deviation. The contract documents and all referenced codes, standards, and other ordinances are the instruments used to judge the acceptability of the work. Items that do not meet the requirements and specifications of these documents must be either removed, corrected, or accepted as change orders by the lender, with an appropriate price adjustment.

The lender may use its own staff or the services of a qualified independent fee inspector to periodically inspect the development work to determine that the construction and land development conform to the drawings and specifications. In any case, the lender must ensure that the inspector has experience inspecting work similar in size, design, scope, and complexity to the project. Fees paid to the inspector must be reasonable and customary in the local area for similar work. The lender's inspections must be made as frequently as necessary. If environmental mitigation measures are required, the inspector must follow-up on the implementation of such measures and document compliance in his or her inspection report. Noncompliance with environmental mitigation measures must be promptly reported to the Agency.

At a minimum, inspections must be made at the three stages of development described below, as well as prior to each payment:

- Stage 1. An Initial inspection immediately prior to or during the placement of concrete footings or monolithic footings and floor slabs.
- Stage 2. An inspection when the building is enclosed, structural members are still exposed, rough in for heating, plumbing, and electrical work is in place and visible, and wall insulation and vapor barriers are installed. Customarily, this is prior to installation of brick veneer or any interior finish which could include lath, wallboard and finish flooring.



Exhibit 5-3**Example of Life Cycle Cost Analysis**

Life cycle cost analyses will be reviewed by the Agency and will be used in the Agency's decision-making process.

The key to life cycle cost analysis is to calculate the present value of all current and estimated future costs associated with an item. Those costs can then be compared with the life cycle costs of alternative items to determine which would be most economical over time.

Calculating the present value to all current and estimated future costs is done by multiplying each year's estimated cost by a present value factor (PVF), which is represented by the formula $[1/(1+I)]^N$. "I" equals the discount rate and "N" equals the number of years in which costs will occur.

The following is an example of the costs for an electric water heater. These costs can be compared, for example, with the life cycle costs of a gas water heater.

Initial Installation Cost:	\$450
Operation Cost per Year:	\$120
Maintenance Cost (every 5 yrs.)	\$100
Life Expectancy:	14 years
Discount Rate:	5%

Year	Annual Cost	PVF	Present Value
Initial Cost	450.00	1.0000	450.00
1	120.00	0.9542	114.29
2	120.00	0.9070	108.84
3	120.00	0.8638	103.66
4	120.00	0.8227	98.72
5	220.00	0.7835	172.37
6	120.00	0.7462	89.55
7	120.00	0.7107	85.28
8	120.00	0.6768	81.22
9	120.00	0.6446	77.35
10	220.00	0.6139	135.06
11	120.00	0.5847	70.16
12	120.00	0.5568	66.82
13	120.00	0.5303	63.64
14	120.00	0.5051	60.61
TOTAL			1,781.50

- Stage 3. A final inspection when all on-site and off-site development has been completed and the structure is ready for occupancy for its intended use.

Note that inspections at each of these stages must be made of each building. In a project with multiple buildings, inspection of one building will not be deemed sufficient to meet these requirements.

The lender must notify the Agency when each of these three major inspections is scheduled so that an Agency inspector may, if time permits, join the lender's inspector in conducting these inspections.

Any work or material deficiencies noted or alleged as a result of any inspections by the lender's inspector must be reported to the borrower or borrower's architect, or other party with the authority to demand that the contractor make necessary corrections.

Exhibit 5-4		
Documents That Must Be Submitted for Guarantees of Construction Advances		
Document	When to Submit	Reference
Construction change order	Before related work begins or costs are included in a payment request	Paragraph 5.18
Lender-approved payment estimates and related inspection reports	As soon as possible following payment, but prior to approval of subsequent payment	Paragraph 5.20
Final cost certification	Before final payment to contractor	Paragraph 5.21
Certification that additional construction requirements have been met	Prior to issuance of permanent loan guarantee	Paragraph 5.22
Form 1980-41	Monthly	Paragraph 5.20

In addition to the inspections described above, inspections must be made prior to each payment to the contractor to confirm the estimated values of work completed and stored materials. Payments must be adjusted if there are any discrepancies in the reported values.

Documentation must be provided for deviations from the approved plans and specifications. For cases where the Agency guarantee is only on the permanent loan, "as built" plans must be provided. For cases where the Agency is guaranteeing the construction advance as well as the permanent loan, contract change orders are discussed in Paragraph 5.18.

5.11 Warranty

The lender must ensure that the contractor or contractors provide a legally enforceable, one-year warranty to the owner indicating that the work done and materials supplied conform to those specified in the contract documents and applicable regulations. The warranty must provide that the contractor agrees to repair defective workmanship and repair or replace any defective materials at his own expense for the period of the warranty.

5.12 CONSTRUCTION REQUIREMENTS CERTIFICATION

To ensure that each of the basic construction requirements described in this section have been met, the lender must provide a signed certification to the Agency prior to the issuance of the loan guarantee.

SECTION 3: GUARANTEES OF CONSTRUCTION ADVANCES

5.13 OVERVIEW

The Agency will guarantee construction advances, secured by an acceptable credit enhancement, only as part of a combination construction and permanent loan. A combination construction and permanent loan is a loan that becomes effective at the time construction of an eligible multifamily property begins. The lender underwrites the loan and the Agency provides

a guarantee that covers up to 90 percent of the amounts actually advanced by the lender. As more construction work is accomplished and more funds are advanced by the lender, the monetary amount of the loan that is covered by the guarantee increases. In no case will the guarantee during the construction period exceed 90 percent of the original principal amount of the combination loan.

The Agency will convert the guarantee on the construction advance to a guarantee on the permanent loan in accordance with Chapter 4, Paragraph 4.20.

Example of a Guarantee of Construction Advances	
Total development cost	= \$1,000,000
Lender underwritten loan	= \$900,000
First loan advance	= \$70,000
Guarantee (\$70,000 x 90%)	= \$63,000
First plus second loan advances	= \$150,000
Guarantee (\$150,000 x 90%)	= \$139,000

The Agency will only guarantee construction advances, which have credit enhancements to protect the government's guarantee. Acceptable credit enhancements include any one of the following:

- Surety bonding or performance and payment bonding (preferred).
- An irrevocable letter of credit acceptable to the Agency.
- A pledge by the lender of acceptable collateral.

5.14 INSURANCE

The lender must ensure that property and liability insurance are in place during the course of construction to protect the borrower, the lender, and the contractor from a variety of losses. The construction contract must not become valid until proof of insurance is obtained. The contractor is usually responsible for obtaining and carrying the insurance policies. The amount of coverage, the deductible, and the beneficiary of the policy must be in accordance with commonly accepted lending practices or state or local law.

5.15 SURETIES

Payment and performance bonds covering the contractor's work must be executed prior to the start of any work. The bonds must each have a face value of 100 percent of the construction contract. These surety bonds must be obtained from a corporate bonding company listed on the current Department of Treasury *Circular 570* (published annually in the Federal Register), as holding a certificate of authority as an acceptable surety on Federal bonds, and legally doing business in the state where the project is located.



5.16 LETTERS OF CREDIT

In lieu of payment and performance bonds, the lender may accept an unconditional and irrevocable letter of credit issued by another lending institution to secure the completion of construction. The letter of credit must equal not less than 25% of the construction contract and must remain in effect until the date of final acceptance of work by the owner and the lender, and a certificate of occupancy from the local jurisdiction is issued. In addition, the letter of credit must stipulate that the lending institution that issued the letter of credit, upon written notification by the owner or lender of the contractor's failure to perform under the terms of the contract, will provide payment for an amount not less than 25% of the amount of the contract to satisfy all prior debts incurred by the contractor in performing the contract and all funds necessary to complete the work.

An irrevocable Letter of Credit issued by a bank or other approved financial institution must meet strict credit quality requirements (see Exhibit 5-5 for credit quality requirements) and be valid and collectable.

Exhibit 5-5 Credit Quality Requirements for Letters of Credit		
Thomson's Bankwatch	N/A	"B" or better
S&P	Long term debt, if rated, or long term bank deposit	"A" or better
Moody's	Long term debt, if rated, or long term bank deposit	"A" or better

Further requirements for letters of credit include:

- The issuing institution must not be an affiliate of the lender, unless it has an acceptable rating from an approved rating agency, which is not an affiliate of the lender.
- Federal Home Loan District Bank enhancement of a member bank letter of credit is an acceptable method for meeting Agency credit standards.
- The Rural Housing Service (RHS), USDA, must be named as the sole beneficiary.
- The term must be a minimum of one year.
- The form of the letter of credit and the sight draft must be reviewed by the Agency. However, the guaranteed lender is solely responsible for ensuring that the letter of credit is acceptable and enforceable.

5.17 PAYMENT PROCEDURES

Payments to the general contractor should usually be made on a monthly basis. The format of the payment request must be consistent with AIA Document 702, *Application and Certificate for Payment*, which is published by the American Institute of Architects. The payment requests must provide the same breakdown of construction costs as the final and approved cost estimate before construction began. They must be signed by the contractor and approved in writing by the borrower, the borrower's architect, and the lender.

The amount of the partial payments are based on the amount of work completed, the amount of materials stored on site, and the amount of retainage. The determination of the amount of work completed and the amount of stored materials must be made by the lender after consultation with the borrower, the borrower's architect, and on-site observations. The amount of retainage will be set by the lender. The retainage amount must be withheld until substantial completion.



Payment requests may include charges for change orders only after the change orders have been signed by the lender and the Agency representative. Partial payments for overhead and profit may be made to contractors provided the percentages paid on each item are no higher than the percentage of total construction completed.

When construction is determined to be substantially complete, an amount determined to be adequate to cover any remaining work items must be withheld from the contractor. This amount is normally included in the retainage. If the amount of remaining work is higher than the budgeted retainage, then the retainage must be adjusted upward accordingly.

5.18 CONTRACT CHANGE ORDERS

Any construction changes that occur after a contract is executed, which affect design, costs, time, or the provision of financial assistance in connection with the change order, must be documented as a contract change order. Changes that do not affect design, cost, or time are deemed minor and must be documented as field orders by the architect. These minor changes do not require the preparation of a change order. All proposed change orders must be signed by the borrower, borrower's architect, contractor, lender, and Agency representative in writing before the work involved in the change is started or the costs are included in a payment request. Provision of additional financial assistance in connection with a contract change order does not require preparation of an environmental review by the Agency, provided that the action will not alter the purpose, operation, location, or design of the project as originally approved.

5.19 MODIFICATION OF MAXIMUM AMOUNT GUARANTEED DURING CONSTRUCTION

There are two situations, which may result in a modification of the maximum loan amount that will be guaranteed during the construction period.

- If following full underwriting by the lender and the issuance by the Agency of a conditional commitment to guarantee part of the loan, but prior to the start of construction, there are changes in the proposed construction or development work that will reduce the loan amount, the lender must notify the Agency. While the amount covered by the guarantee will be reduced, the percentage of the loan amount guaranteed will remain the same.

- If the construction is not in accordance with approved plans and specifications, the Agency may not issue the guarantee or may reduce the guarantee amount. For example, if the materials used are below the standards described in the approved specifications, the Agency may disapprove or reduce the guarantee.

5.20 REPORTING DURING CONSTRUCTION PERIOD

The lender is responsible for ensuring that the Agency is provided a copy of approved payment estimates and the related inspection reports prepared by the lender's fee inspector and by the project architect. This documentation must be provided in a timely fashion to the Agency following each draw.



Once a new draw is issued, the lender is responsible for ensuring that the Agency has the information needed to adjust the guarantee. In addition the lender must submit *Form RD 1980-41, Guaranteed Loan Status Report*, on a monthly basis to the USDA Finance Office. This information is listed in Exhibit 5-4.

Exhibit 5-6 shows the notifications to the Agency required during the construction guarantee period.

Exhibit 5-6		
Notifications Required During the Construction Guarantee Period		
Notification	When to Notify	Reference
Major inspections	As soon as a major inspection is scheduled	Paragraph 5.10
Project changes requiring an environmental review	As soon as the project change is proposed, that alters purpose, operation, location, or design, as according to Paragraph 5.18	Paragraph 5.18
Project changes reducing the loan amount	After Agency issues guarantee but prior to construction start	Paragraph 5.19

5.21 FINAL PAYMENT

The lender must ensure the following items have been completed before final payment is provided to the contractor.

- Final inspection. The lender should coordinate the final inspection with all parties, including the borrower's architect, the lender's fee inspector, the local government, and the Agency, so that the inspections may be done at the same time. In all cases, the Agency will conduct a final inspection.
- Completion of construction. All construction must have been completed in an acceptable manner. The borrower, the borrower's architect, and any local jurisdiction must state their final acceptance, in writing, before the lender issues its acceptance.
- Final cost certification. The lender is responsible for certifying to the Agency that the borrower's cost certification accurately represents the actual cost of the work performed in connection with the construction. However, if a cost certification is prepared for any other funding source (e.g., an agency providing Low-Income Housing Tax Credits), then a copy of that cost certification is acceptable. If the cost certification indicates any "to be paid" costs, those amounts must be included in the amount of retainage being withheld.
- Warranties. A builder's warranty of at least one year, and other required product/material warranties and information must be provided to the borrower before final payment is made. The warranties should become effective on the date of substantial completion.
- Final payment documents. All final payment documents required by the lender, such as release of liens, must have been executed and must be available at the time of final payment.

5.22 CERTIFICATION THAT ADDITIONAL REQUIREMENTS HAVE BEEN MET

To ensure that the lender has addressed each of the additional construction requirements described in this section, the lender must include a signed form certifying that each requirement has been met prior to the Agency issuance of a loan guarantee.

SECTION 4: APPLICATION PROCESSING FOR GUARANTEES ON CONSTRUCTION ADVANCES

5.23 OVERVIEW OF PROCESS

As more construction work is accomplished and more funds are advanced by the lender, the monetary amount of the loan that is covered by the 90 percent guarantee increases.

Once construction begins, the guarantee will be adjusted based on the amount of money advanced. Adjustment of the guarantee will be automatic as long as the lender complies with the reporting requirements of this chapter.

SECTION 5: CLAIMS PROCESSING FOR GUARANTEES ON CONSTRUCTION ADVANCES

5.24 OVERVIEW OF PROCESS

For loans on construction advances where a default occurs prior to the issuance of the permanent guarantee, liquidation, disposition, and claims processing should be in accordance with Chapter 10.